

CHILD HEALTH RESEARCH PROJECT

Research Priority Review and Gap Analysis

Submitted by:

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and

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INTRODUCTION

USAID's Child Health Research Project (CHR) requested that MEDS (Monitoring, Evaluation and Design Support) Project conduct a survey of Cooperating Agencies (CAs) working in child health (SO3). The purpose of the survey was to catalog USAID's health research efforts and to determine how closely the research conducted by the CAs correlated with the Agency's stated research priorities. Following the initial collection of data, CAs implementing activities under other Agency SOs were surveyed and the results of those surveys were included in the database. It is anticipated that additional CAs will be added to future updates of the database.

CHR identified sixty-three health and population CAs that potentially conducted research supporting any of the Agency's five SOs during the two previous years. To collect the data MEDS, in consultation with CHR staff, developed a spreadsheet questionnaire (Appendix A). After CHR staff informed the Cognizant Technical Officers (CTOs) about the health research data collection effort, MEDS contacted the CTO of each of the identified CAs and requested their assistance in completing the questionnaire. CTOs either assisted in completing the questionnaire, referred MEDS to the appropriate CA contact person or indicated that the CA was not involved in health research during the time period of the survey. In some cases, CAs supplied MEDS with their annual reports from which survey data was extracted. Research was self-defined by the CTO or by the CAs. A complete list of Collaborating Agencies contacted can be found in Appendix B.

Survey questionnaire data categories included:

1. Strategic Objective

- SO1- Increased use by women and men of voluntary practices that contribute to reduced fertility
- SO2- Increased use of key maternal health and nutrition interventions
- SO3- Increased use of key child health and nutrition interventions
- SO4- Increased use of improved, effective and sustainable responses to reduce HIV transmission and mitigate the impact of the HIV/AIDS pandemic
- SO5- Increased use of effective interventions to reduce the threat of infectious diseases of major public health importance

2. Intermediate Result

- Intermediate result that the research project contributed to.

3. Countries/Region

- Which country/ies or region(s) of the world was the focus of the research.

4. Study Objectives/ Research Question

- Topic of research, question/issue being studied.

5. Key Collaborators

- Agencies other than the respondents that participated in the research.

6. Methodology

- How data were gathered and what type of collection instrument was used.

7. Status

- Whether project was planned, ongoing, or completed at the time the matrix was completed.

8. Brief Description of Results

- Actual outcome of research.

MEDS emailed the requests for information and a blank matrix to the CAs in early February 2002, asking them to complete the matrix by early March. In early April the outstanding CAs were contacted and requested to turn in their information. Meanwhile, the information was compiled and efforts were made to determine the most useful format for its compilation.

Following the deadline, MEDS continued to encourage CAs to return outstanding surveys pointing out the importance of their research being acknowledged in this office-wide survey. Follow-up emails were sent, and then phone calls were made to the contact person for the CA. If those attempts did not generate a response the Cognizant Technical Officers (CTOs) were contacted and asked to further encourage their CA to submit the information.

MEDS designed and implemented an analytical database for the analysis of the survey data using Access. Additional CAs were surveyed through October 2002. The results of the survey were loaded in the analytical database that MEDS developed. A research priority coding scheme was developed based on stated Agency research priorities (Appendix C) and each research activity was coded with a priority category and a priority code.

RESULTS

Response Rate

Forty-three CAs responded that they are doing or have completed research during the last two years. However, the decision of what constituted research varied widely.

Nineteen CAs responded that they do not conduct research or have not conducted it in the 2 years (2000-2002) that are included in this exercise.

One CA did not respond. Other CAs were identified for future updates of the database.

Geographical Distribution of Research Activities

The CAs reported a total of 914 research activities in a total of 78 countries. In addition 180 activities had global relevance (See Appendix D). Some research activities were being conducted in multiple countries. Such activities were coded for each country involved so that the total number of country-specific activities exceeds the total number of reported activities. A total of 325 research activities were reported for Africa in 32 countries. In Asia and the Near East, 271 research activities were conducted in 20 countries. For Europe and Eurasia, 27 activities were conducted in 13 countries. In Latin America and the Caribbean, 109 research activities were conducted in 18 countries. As indicated above, 180 activities had global relevance.

Geographical Distribution by CAs

A directory of countries characterized by the CAs working in that country can be found in Appendix E. In many cases, multiple CAs reported research activities in the same country.

Research Activities by Priorities

Based on the Agency's stated research priorities (1999-2000) and an analysis of the survey results, the following research category codes were used to code individual activities (the number in parenthesis is the number of activities reported). Activities could be coded for multiple priority categories:

- Acute Respiratory Infection (32)
- Adolescent Reproductive Health (28)
- Antimicrobial Resistance (37)
- Child Health (12)
- DHS (23)
- Diarrheal Disease (38)
- Environmental Health (4)
- Family Planning/Reproductive Health (238)
- Health Systems (41)

- HIV/AIDS (132)
- IMCI/CIMCI (28)
- Immunization (10)
- Infectious Disease (22)
- Malaria (52)
- Maternal Health (55)
- Nutrients/Micronutrients (58)
- Orphans (2)
- Perinatal/Neonatal (30)
- Polio (7)
- STD/STI (31)
- TB (12)

A listing of the CAs conducting research under each research priority category code is seen in Appendix F. Although most of the stated priorities are represented, research activities tended to cluster around a few of the specific priority codes under any given priority category.

CONCLUSION AND NEXT STEPS

Although the major research priority categories are well represented in the database, there appears to be a lack of coordination of research efforts between the various SO teams and between the CAs. There does not seem to be an institutionalized Bureau-wide planning mechanism. Consequently, research does not appear to be coordinated or phased in a way to use data effectively to inform others doing similar research within the Agency. It is also not apparent that introduction of research result and implementation are considered extensively in research activity planning and implementation.

Since CAs were allowed to self-define research there is a wide spectrum of activities that were designated research. In future updates of this database, it would be very valuable to precisely define research in the USAID context so that there will be more uniformity in what is reported as research efforts. Also it would be very valuable if the CAs also coded their activities for USAID research priorities. Secondary coding is very labor intensive and in many cases requires interpretation and extensive follow-up.

This database is a very important beginning and first attempt to gather the Bureau's research efforts into a single database. The experiences from creating this database are already being used to design a comprehensive Bureau-wide research database to be used to identify cross-cutting research issues. If this database effort is to continue, it is important that the design, implementation, management and maintenance of the updated database be done by a CA that has the both the expertise and responsibility to manage Agency databases. A web-enabled database available to CAs would minimize collection and entry efforts and would maximize use of the data.

APPENDIX A

Health Research Mapping

MATRIX format for compilation of information from CAs/PVOs (revised 2/1/02)

SO ¹	IR ¹	Study Objective(s)/ Research Question(s) ²	Implementing CA	Collaborating Organizations	Methodology	Current Status -Planned (not yet initiated) -Ongoing -Completed (start and end date) ³	Countries / Region	Brief Description of Results

¹ SO and IR refer to the past SO and IR. We understand this terminology may be changing.

² What is or were the key research question or questions?

³ Please include activities completed in the past two years.

APPENDIX B

CAs SURVEYED

CAs Reporting Research Activities

ARIVAC	MEASURE COMMUNICATION
BASICS II	MEASURE DHS+
CARE MoRR	MEASURE EVALUATION
CDC	MGL
CHANGE Project	MOST
CHR	MICRONUTRIENTS FOR HEALTH
CONRAD	MVDP
DATA FOR DECISION MAKING II	NETMARK
DELIVER	OCP
EHP II	PHR Plus
ENABLE	POLICY II
FANTA	POPULATION COUNCIL
FHI	PRIME II
FOCUS	QUALITY ASSURANCE II
FRONTIERS	RPM+
HEALTHTECH IV:	TUBERCULOSIS COALITION TA
HKI	US PHARMACOPEIA
HORIZONS	WHO
IMPACT	WHO STRENGTHENING OF
JHPIEGO/MNH	HEALTH SERVICES
LINKAGES	WHO/TDR
	WHO/RH

CAs Reporting No Research Activities

AIMI

CVP

Data for Decision Making (PHNI)

DCOF (Displaced Children and Orphans Fund: Vulnerable Children and War

Victims Results Package)

GHC

Health Resources Support II

HPSS Plus

Infectious Diseases Results Package: NIH Tuberculosis Research and Training

International Children's Vaccine Training Program: Vaccine Quality Assurance Training
Program

International HIV/AIDS Alliance

MEDS

NGO Networks for Health

The Synergy Project

TASC

UNAIDS

UNICEF

VOA

CAs Not Responding

AIDSMARK (AIDS Social Marketing)

APPENDIX C

POPULATION, HEALTH, AND NUTRITION RESEARCH PRIORITIES

SO1 FP/REPRODUCTIVE HEALTH

Development of New Technologies

- Expanded range and availability of safe, effective and acceptable technologies for the prevention of unintended pregnancies and HIV/STIs.
- Design and implement pre-clinical, clinical, and acceptability studies on a wide range of methods:
 - Barrier Methods for dual protection such as male and female condoms, diaphragms, and microbicides;
 - Long-acting hormonal methods such as implants, injectables, vaginal rings;
 - Development of improved delivery technologies such as safer injection systems;
 - Systematic methods for men such as long-acting hormonal methods; and/or
 - Natural methods of family planning.

Technology Introduction

- Expanded knowledge and use of Contraceptives and reproductive health technologies.
 - Assess product acceptability of clients and the effectiveness, safety, and long-term risk and benefits of new and existing methods through introduction and epidemiological studies.
 - Produce and disseminate current information and guidelines of new technologies to policy makers and providers.
 - Analyze service delivery capacity to add new technologies.

Operations Research

- Solutions to priority service delivery issues utilized by national programs, cooperating agencies, and other donors for program and policy improvement and strengthened capacity of partners to conduct and utilize operations research.

- Flexible access to the technical expertise needed to develop, monitor and evaluate program activities.
- Practical and cost-effective interventions aimed at improving both the access to and quality of family planning and selected reproductive health services.
- Integration of Female Genital Cutting into ongoing activities at the community level, with participation of community members in ways that are culturally sensitive and appropriately designed.

SO2: REDUCING MATERNAL MORTALITY

Nutrition

- What is the impact of multi-micronutrient and protein/energy dietary interventions in adolescence and women of reproductive age on pregnancy outcomes?

Birth-Preparedness

- Package: What is a cost-effective package of evidence based interventions and information that best serves the pregnant woman and her pregnancy outcome?
- Community Mobilization/Insurance approaches: What insurance approaches/other community mobilization approaches will ensure rapid transport of woman displaying danger signs, overcome barriers in the use of facilities and ensure coverage by skill attendants at birth for optimal pregnancy outcomes?
- HIV/AIDS: What is the impact of issues related to HIV best introduced in the facilities/community and what is the best approach to treatment of STDs during pregnancy?

Management of Complications

- What is the best package of interventions to be offered by providers at different skill levels to ensure maximal impact in the community on maternal survival?
- What are best ways to reduce delay after women reach the facility (e.g. QA approaches; satellite/cellular communications to a reference center; improved training of personnel with clinical algorithms)?
- What demand creation activities (community, non-maternity, non-health) improve use of referral facilities for complication?
- What is the impact of reporting systems and maternal/perinatal audits on provider practices and on pregnancy outcomes?

Safe Delivery and Postpartum/Newborn Care

- What provider training is necessary?
- Does immediate postpartum breastfeeding reduce blood loss?
- What is an effective package of skills and material for each level of health care provider during delivery, postpartum, neonatal, and family planning to ensure optimal outcomes?

- What is the prevalence of harmful practices among women/providers and how are they best overcome?

Post-abortion/FP/Pregnancy Delay

- Can training/services in post-abortion/FP provision skills be combined with training in managing complications of pregnancy?
- What are the practical linkages of the community to facilities in the area?
- What are the effective approaches to ensuring spacing of subsequent pregnancies for best maternal health and child survival outcomes?

SO3: REDUCING CHILD MORTALITY

Nutrition/Micronutrients

- Effect of Vitamin A and multi-micronutrients on the health of women and children.
- Effect of zinc and multi-micronutrient supplementation (preventive and case treatment of ARI, diarrhea and malaria mortality and morbidity in children.
- Impact of treatment of severe vs. moderate anemia.
- Effectiveness of improved adolescent (pre-conception) nutritional status on maternal and infant health.
- Operations research on the quality of food supply and child morbidity and mortality.

Perinatal/Neonatal

- Efficacy/Effectiveness/Cost of interventions to prevent or treat neonatal sepsis/pneumonia/meningitis.
- Assessment of STI treatment in improving perinatal/neonatal outcomes (including low birth weight).
- Effectiveness of interventions to reduce perinatal asphyxia and its consequences.
- Prevalence and impact of high-risk practices during pregnancy, labor and delivery, and the neonatal period.
- Further evaluations of interventions to reduce low birth weight and manage low birth weight infants.
- Contribution of micronutrients to neonatal morbidity and mortality.
- Effectiveness and cost of interventions to reduce mother-to-child transmission of HIV.

Acute Respiratory Infections

- Antimicrobial resistance.
- Case management of the very young and care seeking behavior of mothers of very young infants.

- Evaluation and introduction of vaccines - Hib, pneumo, RSV.
- Role of zinc.
- Improved diagnostics.
- Role of HIV infection in children in treatment failures and disease and epidemiology.

Diarrheal Diseases

- Efficacy trial of Rotavirus vaccine.
- Role of zinc and multi-micronutrients on the prevention and treatment of diarrheal disease.
- Improved diagnostics.
- Evaluation of interventions to decrease persistent diarrhea and dysentery.
- Design and evaluate a "package" of interventions that include reducing diarrheal disease mortality and morbidity.

SO4: REDUCING HIV/AIDS and STIs

Scaling Up and Increasing Participation in Proven HIV/STI Interventions

- OR to develop tools and approaches to bring key, effective, BCI, STI, CSM and community mobilization interventions to scale at the population level.

Links Between Curative, Care-giving, Prevention Services and Outcomes

- What is the range and strength of short-term and long-term links between care/support services and prevention services?
- How can the mutual benefits be enhanced in existing programs?
- Is providing services/benefits for PHLA and/or their families a cost-effective strategy?
- What is the range of benefits/services that can be provided (including the minimum required to produce the desired effects), and how can the costs be estimated for particular settings?
- What is the appropriate role and cost-effective scale of Voluntary HIV Counseling and Testing (VCT) services in national HIV/AIDS programs?
- What are the most medically, socially, and culturally adequate and financially sustainable models of Community and Home-based care, for implementation in different settings?
- How can MTCT interventions be delivered, what resources are required, what are the direct and indirect effects?

HIV/AIDS Stigma, Discrimination, and Human Rights

- What are the different elements/sources of stigma associated with HIV and STI? How do they interact? How do different elements play out in particular regions and/or populations? How do they affect the behavior of key actors in the HIV/AIDS response?
- How are elements of stigma transmitted, maintained, or "socially reproduced": can these processes be influenced?
- What training approaches, messages, and interventions are needed to interrupt the reproduction of stigma in HIV/AIDS or STI interventions and policies and other health and development programs?

Behavior Change Communication (BCC) and Condom Social Marketing (CSM)

- What is the best mix of SM and "traditional" IEC approaches and activities for behavior change at the population level and how/can/should this mix be achieved and sustained programmatically?
- How well coordinated and synergistic are CSM programs and broader HIV and reproductive health IEC activities at the country level?
- Do the behavior change communications developed for CSM induce attitudinal and behavior change and increase demand for HIV/STI prevention?
- What are the hallmarks of "second generation" HIV and STI messages and intervention approaches? Are they more effective than older messages and approaches? By how much?

Monitoring and Evaluation

- What are the best, feasible (affordable) methodologies for national HIV/AIDS programs to assess the status and trends of the epidemic?
- What is the proper role of HIV case detection (e.g. in antenatal clinics) in assisting HIV surveillance?
- To what extent, and how, can HIV surveillance be used for evaluation of HIV intervention programs?
- OR to define, validate and calibrate indicators of progress and quality regarding SO4's NGO capacity building, mitigation, community participation, and sustainability goals.

SO5: REDUCING EMERGING INFECTIOUS DISEASE

Malaria

- Improved drug regimens for treatment of clinical illnesses and for disease prevention in pregnancy vis-à-vis drug resistance, and for development of drug policy tools.
- Vaccine development.
- Effect of micronutrients of disease and the development of immunity.
- Development of new tools (assays and algorithms) to diagnose infection and disease.
- Development of new tools for analysis and modification of provider, caretaker, and patient behavior vis-à-vis prescription policy, health seeking, and drug and insecticide impregnated mosquito net use.
- Long-term evaluation of the effectiveness of insecticide impregnated mosquito bed nets.

Antimicrobial Resistance

- Development of simple field-adapted diagnostics to detect resistance and practical surveillance approaches related to time intervals, source of specimens, and sampling methodology.
- Improved diagnosis (greater specificity) and treatment of ARI (different dosages, regimens, use of drug combinations) which reduces drug use and decreases the development of resistance.
- Analysis of the factors that influence the use of antimicrobial drugs, and evaluation of new interventions to improve drug policy decisions, management, compliance, care seeking, prescribing and dispensing.
- Improved understanding of how priority microbial populations change in response to drug and vaccine pressure and development of predictive models in selected environments.
- Development and testing of a methodology to analyze the factors (prescriber, patient, health system, information, economic, commercial, non-medical, microbial) influencing the development of resistance at the country level.

- Operation research regarding how drug use, drug resistance, and epidemiological information is used at different levels in the health system, and what approaches are most effective in improving the use of data for decision making.

Tuberculosis

- New diagnostic techniques to diagnose the disease cheaply and quickly.
- New treatment regimens (requiring fewer drugs) for greater compliance and completion rates and for cost-effective fixed drug combinations (FDCs) to determine optimal treatment guidelines.
- Operations research to determine the behavioral basis (by providers and patients) of adherence and non-adherence to treatment regimens.
- Improved training methods.

APPENDIX D
NUMBER OF RESEARCH ACTIVITIES BY COUNTRY

Region	Country	Number of Activities
Africa	South Africa	40
	Ghana	39
	Kenya	36
	Uganda	27
	Zambia	25
	Niger	19
	Senegal	19
	Nigeria	15
	Ethiopia	14
	Zimbabwe	11
	Benin	9
	Tanzania	9
	Madagascar	6
	The Gambia	6
	Burkina Faso	5
	Malawi	5
	Mali	5
	Mozambique	5
	Namibia	5
	Rwanda	5
	Cameroon	4
	Guinea	4
	Côte d'Ivoire	2
	Eritrea	2
	Africa Region	1
	Angola	1
	Congo	1
	Djibouti	1
	Lesotho	1
	Sudan	1
	Togo	1
	Togo	1
AFR Total		325
Asia and the Near East	Bangladesh	67
	India	52
	Nepal	26
	Indonesia	20

Region	Country	Number of Activities
	Egypt	16
	Pakistan	15
	Vietnam	15
	Philippines	14
	Thailand	10
	Cambodia	8
	West Bank/ Gaza Strip/ East Jerusalem	8
	Jordan	5
	Morocco	5
	Asia Region	2
	Sri Lanka	2
	Tunisia	2
	Iran	1
	Lebanon	1
	Yemen	1
		1
ANE Total		271
Europe and Eurasia	Russia	6
	Kazakhstan	4
	Romania	4
	Baltic Sea Region	2
	Latvia	2
	Ukraine	2
	Armenia	1
	Azerbaijan	1
	Croatia	1
	Ireland	1
	Turkey	1
	Turkmenistan	1
	Uzbekistan	1
E&E Total		27
Latin America and the Caribbean	Peru	14
	Brazil	12
	Mexico	12
	Guatemala	11
	Ecuador	10
	Bolivia	9

Region	Country	Number of Activities
	Dominican Republic	7
	Haiti	6
	Jamaica	6
	El Salvador	5
	Nicaragua	4
	Chile	3
	Colombia	3
	Honduras	3
	Central America	1
	Costa Rica	1
	Paraguay	1
		1
LAC Total		109
Oceania	Australia	2
Global	N/A	180
Overall Total		914

APPENDIX E

CAs CONDUCTING RESEARCH BY COUNTRY

Region	Country	Cooperating Agencies
Africa	Angola	WHO-RH
	Benin	CHR, EHP, FRONTIERS, IMPACT, MEASURE DHS+, MEASURE Evaluation, QA
	Burkina Faso	FANta, FONTIERS, FANTA, HORIZONS
	Cameroon	FHI
	DR Congo	EHP, WHO/TDR
	Côte d'Ivoire	FOCUS, IMPACT
	Djibouti	PHR+
	Eritrea	IMPACT, MEASURE DHS+
	Ethiopia	CHANGE, CHR, FANta, FHI, IMPACT, MEASURE DHS+, MOST, POLICY
	Ghana	CDC, CHANGE, CHR, DELIVER, ENABLE, FANta, FHI, FOCUS, FRONTIERS, LINKAGES, MEASURE Communication, MEASURE DHS+, MGL, MOST, NetMark, POLICY, POPULATION COUNCIL, WHO/TDR
	Guinea	CHANGE, CHR, HKI, MEASURE DHS+
	Kenya	CDC, CHANGE, CHR, DELIVER, FHI, FRONTIERS, HORIZONS, IMPACT, MEASURE Communication, MEASURE DHS+, MGL, MOST, POLICY, PRIME II, QA, RPM Plus, WHO/TDR
	Lesotho	IMPACT
	Madagascar	EHP, FHI, HORIZONS, IMPACT, LINKAGES, MOST
	Malawi	CHANGE, CHR, MEASURE DHS+, POLICY
	Mali	BASICS II, CHR, MEASURE DHS+, QA
	Mozambique	CHANGE, MEASURE DHS+, NetMark, POLICY
	Namibia	BASICS II, IMPACT
	Niger	QA
	Nigeria	ENABLE, FRONTIERS, HORIZONS, IMPACT, NetMark, POLICY
	Rwanda	MEASURE DHS+, POPULATION COUNCIL, QA
	Senegal	BASICS II, CDC, ENABLE, FHI, FRONTIERS, HORIZONS, MEASURE DHS+, NetMark, RPM Plus, WHO/TDR
	South Africa	CDC, CHANGE, CHR, FHI, FRONTIERS, HORIZONS, IMPACT, MGL, MOST, PHR+, POLICY, QA
	Sudan	IMPACT
	Tanzania	CDC, CHANGE, CHR, DELIVER, FHI, HealthTech, HORIZONS, RPM Plus, WHO/TDR

Region	Country	Cooperating Agencies
Africa (cont.)	The Gambia	CHR
	Togo	BASICS II
	Tunisia	PHR+
	Uganda	BASICS II, CDC, CHANGE, CHR, FHI, FRONTIERS, HORIZONS, MEASURE DHS+, MOST, NetMark, QA, WHO/TDR
	Zambia	CARE MoRR, CHANGE, CHR, DELIVER, FOCUS, FHI, HORIZONS, IMPACT, LINKAGES, MEASURE DHS+, MOST, NetMark, QA
	Zimbabwe	CHR, CONRAD, FRONTIERS, FHI, HORIZONS, LINKAGES, Micronutrients for Health/JHU, QA
Asia and the Near East	Bangladesh	CHR, FANta, FHI, FRONTIERS, IMPACT, MEASURES DHS+, Micronutrients for Health/JHU, MOST, PHR+, PRIME II, QA
	Cambodia	CDC, CHR, FOCUS, FHI, HKI, HORIZONS, MEASURE DHS+, POPULATION COUNCIL, WHO/TDR
	Egypt	CHANGE, CHR, ENABLE, FHI, FRONTIERS, IMPACT, MEASURE DHS+, PHR+
	India	CHR, CONRAD, ENABLE, FHI, FRONTIERS, HORIZONS, IMPACT, MEASURES DHS+, Micronutrients for Health/JHU, POLICY, POPULATION COUNCIL
	Indonesia	ARIVA, CHR, FRONTIERS, HKI, JHPIEGO, QA
	Iran	PHR+
	Israel	CHR
	Jordan	Data for Decision Making, IMPACT, PHR+
	Lebanon	PHR+
	Morocco	CHR, EHP, PHR+, QA
	Nepal	CHR, EHP, ENABLE, FHI, FRONTIERS, HORIZONS, IMPACT, MEASURE DHS+, Micronutrients for Health/JHU
	Pakistan	CHR, HORIZONS
	Philippines	CHR, Data for Decision Making, IMPACT, MEASURE DHS+, MOST, PHR+
	Sri Lanka	CHR, MGL
	Thailand	CDC, CHR, CONRAD, HORIZONS, WHO/TDR
	Tunisia	CONRAD, PHR+
	Vietnam	BASICS II, CDC, CHANGE, CHR, HORIZONS, IMPACT, LINKAGES, POPULATION COUNCIL
	West Bank/ Gaza Strip/ East Jerusalem	CHR, EHP, FRONTIERS, POPULATION COUNCIL
	Yemen	PHR+

Region	Country	Cooperating Agencies
Europe and Eurasia	Armenia	MEASURE DHS+
	Azerbaijan	CONRAD
	Croatia	CHR
	Ireland	CHR
	Kazakhstan	CHR, FRONTIERS, MEASURE Communication, MEASURE DHS+
	Latvia	CHR
	Romania	CHR, FRONTIERS, MEASURE Communication, POLICY
	Russia	CHR, FRONTIERS, MEASURE Communication, QA
	Slovak Republic	CHR
	Turkey	POLICY
	Turkmenistan	MEASURE DHS+
	Ukraine	POLICY
	Uzbekistan	MEASURE DHS+
Latin America and the Caribbean	Bolivia	Data for Decision Making, FOCUS, FRONTIERS, LINKAGES
	Brazil	CHR, Data for Decision Making, FHI, HORIZONS, POPULATION COUNCIL
	Chile	CHR, FHI
	Colombia	CHR
	Costa Rica	FRONTIERS
	Dominican Republic	CHANGE, EHP, FOCUS, FRONTIERS, HORIZONS, PHR+, POPULATION COUNCIL
	Ecuador	BASICS II, FRONTIERS, HORIZONS, POPULATION COUNCIL, QA
	El Salvador	CHANGE, FHI, FRONTIERS, PRIME II
	Guatemala	CHR, FRONTIERS, JHPIEGO, LINKAGES, MEASURE-Evaluation
	Haiti	CHR, FANta, FHI, IMPACT, MEASURE DHS+
	Honduras	BASICS II, FRONTIERS
	Jamaica	CHANGE, FHI, IMPACT, POLICY
	Mexico	CHR, FHI, FRONTIERS, HORIZONS, PHR+, POLICY, QA
	Nicaragua	CHANGE, MEASURES DHS+, MOST
	Paraguay	FHI
	Peru	CHANGE, CHR, EHP, FRONTIERS, MEASURE DHS+, QA

Region	Country	Cooperating Agencies
	Uruguay	MEASURE Evaluation
Global	N/A	BASICS II, CDC, CHANGE, CHR, CONRAD, DELIVER, EHP, FANTA, FHI, FRONTIERS, HEALTHTECH, HORIZONS, IMPACT, MEASURE DHS+, MEASURE Evaluation, MGL, MOST, MVDP, NetMark, PHR+, POLICY, POPULATION COUNCIL, QA, RPM Plus, TB Coalition, US Pharmacopoeia, WHO-RH, WHO-Strengthening of Health Services, WHO/TDR,

APPENDIX F

CAs CONDUCTING RESEARCH BY PRIORITY CATEGORY

Priority Category (# of research activities)	CA's
Adolescent Reproductive Health (26)	CHANGE, ENABLE, FHI, FOCUS, FRONTIERS, MEASURE, COMMUNICATION, MEASURE DHS+
AMR (31)	CHANGE, CHR, RPM Plus
ARI (34)	ARIVAC, CDC, CHANGE, CHR, QA,
Child Health (18)	BASICS II, CHR, ENABLE, FRONTIERS, HEALTHTECH, MEASURE Communication, MEASURE DHS+, PRIME II, RPM Plus
DD (37)	CHR, EHP
DHS (20)	MEASURE DHS+
Environmental Health (3)	EHP
FP/Reproductive Health (232)	CARE MoRR, CHANGE, CONRAD, DELIVER, ENABLE, FHI, FOCUS, FRONTIERS, HEALTHTECH, MEASURE Communication, MEASURE DHS+, POLICY, POPULATION COUNCIL, PRIME II, QA
Health System (42)	CHANGE, CHR, DATA FOR DECISION MAKING, ENABLE, JHPIEGO, MEASURE Communication, MEASURE DHS+, PHR+, POLICY, QA, WHO-Strengthening of Health Services,
HIV/AIDS (157)	CDC, CHANGE, CHR, CONRAD, ENABLE, FHI, FOCUS, FRONTIERS, HORIZONS, IMPACT, LINKAGES, MEASURE DHS+, MICRONUTRIENTS FOR HEALTH, PHR+, POLICY, POPULATION COUNCIL, RPM Plus, US PHARMACOEPIA
IMCI/CIMCI (28)	BASICS II, CHANGE, CHR, QA, RPM Plus
Immunization (10)	BASICS II, CHANGE, HEALTHTECH
Infectious Disease (22)	CHR, EHP, MGL, OCP, US PHARMACOEPIA
Malaria (35)	CDC, CHR, HEALTHTECH, MEASURE DHS+, MVDP, NETMARK, PATH, WHO/TDR
Maternal Health (52)	CARE MoRR, CHANGE, CHR, ENABLE, FRONTIERS, HEALTHTECH, JHPIEGO, MEASURE Communication, MEASURE DHS+, MEASURE Evaluation, MGL, MICRONUTRIENTS FOR HEALTH, POLICY, QA, US PHARMACOEPIA, WHO-RH
Nutrients/Micronutrients (60)	BASICS II, CHANGE, CHR, FANTA, HEALTHTECH, HKI, LINKAGES, MEASURE DHS+, MGL, MICRONUTRIENTS FOR HEALTH, MOST, WHO-RH
Orphans (8)	CHR, ENABLE, IMPACT, POLICY
Perinatal/Neonatal (39)	BASICS II, CHANGE, CHR, FRONTIERS, JHPIEGO, LINKAGES, MEASURE Evaluation, MICRONUTRIENTS FOR HEALTH, MGL, POLICY, US PHARMACOEPIA
Polio (7)	CHANGE, CHR, US PHARMACOEPIA
STD/ST (54)I	CDC, CHR, CONRAD, FHI, HEALTHTECH, HORIZONS, IMPACT, MEASURE DHS+, ENABLE, FOCUS, FRONTIERS, HORIZONS, IMPACT
TB (12)	CDC, CHR, HEALTHTECH, TB COALITION

APPENDIX G
NUMBER OF ACTIVITIES BY RESEARCH PRIORITY

RESEARCH PRIORITIES	# OF ACTIVITIES
ADOLESCENT REPRODUCTIVE HEALTH	28
BEHAVIOR CHANGE/BEHAVIOR COMMUNICATION	1
DIAGNOSIS AND ASSESSMENT	1
INTRODUCTION OF TECHNOLOGY	4
KAP	5
OTHER	4
PREVENTION	1
RISK	2
SERVICES	6
SOLUTIONS TO PRIORITY SERVICE DELIVERY ISSUES UTILIZED BY NATIONAL PROGRAMS, COOPERATING AGENIES, AND OTHER DONORS FOR PROGRAM AND POLICY IMPROVEMENT, OR CAPACITY STRENGTHENED	2
TREATMENT	2
AMR	37
ANALYSIS OF FACTORS THAT INFLUENCE THE USE OF ANTIMICROBIAL DRUGS	1
ANTIMICROBIAL RESISTANCE	32
KAP	1
RATIONAL USE OF MEDICINE	1
TREATMENT	2
ARI	32
ANTIMICROBIAL RESISTANCE	9
CASE MANAGEMENT OF THE VERY YOUNG AND CARE SEEKING BEHAVIOR OF MOTHERS OF VERY YOUNG INFANTS	1
EVALUATION AND INTRODUCTION OF VACCINES	12
INDOOR POLLUTION	1
NEW DIAGNOSTIC TECHNIQUES TO DIAGNOSE THE DISEASE	1
PHARMACOKINETICS	1
PREVENTION	2
RATIONAL USE OF MEDICINE	
ROLE OF ZINC	1
TREATMENT	4

CHILD HEALTH	12
PREVENTION	1
RATIONAL USE OF DRUGS	2
RISK	1
SERVICES	
SURVEILLANCE, SURVEY, DATA MANAGEMENT	2
TREATMENT	4
DIARRHEAL DISEASE	38
DESIGN AND EVALUATE A "PACKAGE" OF INTERVENTIONS THAT INCLUDE REDUCING DD MORTALITY AND MORBIDITY	3
EFFECT OF ZINC AND MULTI-MICRONUTRIENTS SUPPLEMENTATION	1
EVALUATION AND INTERVENTIONS TO DECREASE PERSISTENT DIARRHEA AND DYSENTERY	1
EVALUATION AND INTRODUCTION OF VACCINES	2
IMPROVED DIAGNOSTICS	3
ORS/ORT	1
PATHOGENSIS	2
RISK	1
ROLE OF ZINC AND MULTI-MICRONUTRIENTS ON THE PREVENTION AND TREATMENT OF DIARRHEAL DISEASE	4
ROTAVIRUS VACCINE	7
SAFE WATER/SANITATION	5
SURVEILLANCE, SURVEY, DATA MANAGEMENT	5
TREATMENT	3
DHS	23
MEASURING THE DIRECT CAUSE OF MATERNAL MORTALITY	7
SURVEILLANCE, SURVEY, DATA MANAGEMENT	16
ENVIRONMENTAL HEALTH	4
BEHAVIOR CHANGE/BEHAVIOR CHANGE COMMUNICATION	1
OTHER	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	2

FP/REPRODUCTIVE HEALTH	238
ANALYZE SERVICE DELIVERY CAPACITY TO ADD NEW TECHNOLOGIES	2
CAPACITY BUILDING	9
ASSESS PRODUCT ACCEPTABILITY TO CLIENTS AND THE EFFECTIVENESS, SAFETY, AND LONG-TERM RISKS AND BENEFITS OF NEW AND EXISTING METHODS THROUGH INTRODUCTION AND EPIDEMIOLOGICAL STUDIES	31
BEHAVIOR CHANGE/BEHAVIOR CHANGE COMMUNICATION	1
CONNECTING WOMEN WITH SERVICES	3
CONTRACEPTIVE AND/OR RH COMMODITY SECURITY	5
DESIGN AND IMPLEMENT PRE-CLINICAL, CLINICAL, AND ACCEPTABILITY STUDIES ON A WIDE RANGE OF METHODS	33
DIAGNOSIS AND ASSESSMENT	5
FEMALE GENITAL CUTTING	4
INTRODUCTION OF TECHNOLOGY	27
KAP	11
OTHER	26
PREVENTION	5
PRODUCE AND DISSEMINATE CURRENT INFORMATION AND GUIDELINES OF NEW TECHNOLOGIES TO POLICY MAKERS AND PROVIDERS	7
QUALITY ASSURANCE	1
RISK	4
SERVICES	25
SOLUTIONS TO PRIORITY SERVICE DELIVERY ISSUES UTILIZED BY NATIONAL PROGRAMS, COOPERATING AGENCIES, AND OTHER DONORS FOR PROGRAM AND POLICY IMPROVEMENT, OR CAPACITY STRENGTHENED	35
SURVEILLANCE, SURVEY, DATA MANAGEMENT	1
TREATMENT, PREVENTION, AND SERVICES	3
HEALTH SYSTEM	41
ACCREDITATION	1
CONNECTING WOMEN WITH SERVICES	1
KAP	
OTHER	14
PREVENTION	1
QUALITY ASSURANCE	11

RATIONAL USE OF MEDICINE	
RISK	1
SERVICES	6
SURVEILLANCE, SURVEY, DATA MANAGEMENT	2
TRAINING	4
TREATMENT, PREVENTION, AND SERVICES	
HIV/AIDS	132
ANTIMICROBIALS	2
BEHAVIOR CHANGE/BEHAVIOR CHANGE COMMUNICATION	2
BLOOD SUPPLY	
CAPACITY BUILDING	11
CARE SEEKING BEHAVIOR	2
ECONOMIC IMPACT	1
EFFECT OF VITAMIN A AND MULTI- MICRONUTRIENTS ON THE HEALTH OF WOMEN AND CHILDREN	1
ELEMENTS/SOURCES OF STIGMA ASSOCIATED WITH HIV/AIDS	2
HOW ARE ELEMENTS OF STIGMA TRANSMITTED, MAINTAINED, OR SOCIALLY REPRODUCED	1
KAP	3
LINKS BETWEEN CURATIVE, CARE-GIVING, PREVENTION SERVICES AND OUTCOMES	1
MOTHER TO CHILD TRANSMISSION	3
MEASURING THE DIRECT CAUSE OF MATERNAL MORTALITY	1
OR TO DEVELOP TOOLS AND APPROACHES TO BRING KEY, EFFECTIVE, BCI, STI, CSM, AND COMMUNITY MOBILIZATION INTERVENTIONS TO SCALE AT THE POPULAR LEVEL	6
ORPHANS	5
OTHER	21
PREVENTION	21
QUALITY ASSURANCE	1
RISK	6
SERVICES	2
SURVEILLANCE, SURVEY, DATA MANAGEMENT	26
TREATMENT	14
IMCI/CIMCI	28
CARE SEEKING BEHAVIOR	2
IMCI/CIMCI	25

QUALITY ASSURANCE	1
IMMUNIZATION	10
EVALUATION AND INTRODUCTION OF VACCINES	1
IMMUNIZATION SAFETY	1
OTHER	4
PREVENTION	2
UTILIZATION AND IMPROVED IMMUNIZATION SERVICES	2
INFECTIOUS DISEASE	22
ANTIMICROBIAL RESISTANCE	6
IMMUNIZATION	1
IMPROVED DIAGNOSTICS	1
NEW DIAGNOSTIC TECHNIQUES TO DIAGNOSE THE DISEASE	1
NEW TREATMENT REGIMENS (REQUIRING FEWER DRUGS) FOR GREATER COMPLIANCE AND COMPLETION	1
PREVENTION	1
RATIONAL USE OF MEDICINES	
RISK	
SURVEILLANCE, SURVEY, DATA MANAGEMENT	8
TREATMENT	2
VECTOR CONTROL	1
MALARIA	31
BEDNETS	7
EVALUATION AND INTRODUCTION OF VACCINES	7
IMPROVED DIAGNOSTICS	1
NEW COMBINATION THERAPIES	1
OPERATIONAL RESEARCH	1
OTHER	3
PREVENTION	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	1
TREATMENT	9
MATERNAL HEALTH/MORTALITY	55
CAPACITY BUILDING	2
CONNECTING WOMEN WITH SERVICES	6
HEMORRHAGE	2
INTRODUCTION OF TECHNOLOGY	1
KAP	1
MEASURING THE DIRECT CAUSES OF MATERNAL MORTALITY	12

OTHER	6
SKILLED ATTENDANCE AND VALIDATION OF SKILLED ATTENDENT	7
SURVEILLANCE, SURVEY, DATA MANAGEMENT	15
TREATMENT	3
NUTRIENTS/MICRONUTRIENTS	58
ANEMIA	11
BREASTFEEDING AND COMPLIMENTARY FEEDING	2
CONTRIBUTION OF MICRONUTRIENTS TO NEONATAL MORBIDITY AND MORTALITY	1
EFFECT OF VITAMIN A AND MULTI- MICRONUTRIENTS ON THE HEALTH OF WOMEN AND CHILDREN	11
EFFECT OF ZINC AND MULTI-MICRONUTRIENT SUPPLEMENTATION (PREVENTIVE AND CASE TREATMENT OF ARI, DIARRHEA AND MALARIA MORTALITY AND MORBIDITY	8
EFFECTS OF MALNUTRITION ON THE PHARMACOKINETICS OF DRUGS	1
FOOD SECURITY	1
IMMUNITY	
IMPROVED DIAGNOSTICS	1
IRON	1
OPERATIONS RESEARCH ON THE QUALITY OF FOOD SUPPLY AND CHILD MORBIDITY AND MORTALITY	3
ORS/ORT	1
OTHER	4
PREVENTION	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	5
TREATMENT, PREVENTION, AND SERVICES	1
VITAMIN A	6
ORPHANS	2
ORPHANS	1
RISK	1
OTHER	6
KAP	1
RISK	1
OTHER	4
PERINATAL/NEONATAL	30
ANEMIA	1
BREASTFEEDING AND COMPLIMENTARY FEEDING	2

CARE SEEKING BEHAVIOR	2
CONTRIBUTION OF MICRONUTRIENTS TO NEONATAL MORBIDITY AND MORTALITY	1
DIAGNOSIS AND ASSESSMENT	1
EFFECT OF ZINC AND MULTI-MICRONUTRIENT SUPPLEMENTATION (PREVENTIVE AND CASE TREATMENT OF ARI, DIARRHEA AND MALARIA MORTALITY AND MORBIDITY	1
EFFICACY/EFFECTIVENESS/COST OF INTERVENTIONS TO PREVENT AND TREAT NEONATAL SEPSIS/PNEUMONIA/MENINGITIS	3
EVALUATION AND INTRODUCTION OF VACCINES	1
IMCI/CIMCI	3
IMMUNIZATION	2
KAP	2
LOW BIRTH WEIGHT	1
MORTALITY	1
OPERATIONAL RESEARCH	1
OTHER	2
PREVENTION	1
ROLE OF ZINC	1
SERVICES	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	1
TREATMENT	2
POLIO	7
IMMUNIZATION	3
KAP	1
OTHER	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	2
STD/STI	31
ANTIMICROBIAL RESISTANCE	1
CAPACITY BUILDING	1
CARE SEEKING BEHAVIOR	2
IMPROVED DIAGNOSTICS	4
KAP	1
PREVENTION	7
QUALITY ASSURANCE	2
RISK	1
SURVEILLANCE, SURVEY, DATA MANAGEMENT	3
TREATMENT	9

TB	12
ANTIMICROBIAL RESISTANCE	3
CAPACITY BUILDING	1
IMPROVED DIAGNOSTICS	1
NEW TREATMENT REGIMENS (REQUIRING FEWER DRUGS) FOR GREATER COMPLIANCE AND COMPLETION	1
OR TO DETERMINE BEHAVIORS BASIS (BY PROVIDERS AND PATIENTS) TO ADHERANCE TO TREATMENT	1
TRANSMISSION	1
TREATMENT	4
TOTAL	866